UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 01/28/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

23377 7590 01/28/2009 WOODCOCK WASHBURN LLP CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET

PHILADELPHIA, PA 19104-2891

EXAMINER			
TECKLU, ISAAC TUKU			
ART UNIT	PAPER NUMBER		
2192	•		

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,951	11/21/2003	Carlton Lane	MSFT-2787/303656.01	2907
TITLE OF INVENTION:	SYSTEM AND METHOD	FOR REGISTERING AND DEPLOYING STORED PROC	EDURES AND TRIGGERS	INTO A

DEVICE DATABASE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including a below or directed oth tions.	for transmitting the ng the Patent, advar nerwise in Block 1,	ISSUE FEE a ice orders and by (a) specifyi	notification of n ing a new corres	ON FEE (if require naintenance fees will pondence address; a	ed). B II be r ind/or	locks 1 through 5 sh nailed to the current (b) indicating a sepa	ould be completed where correspondence address as rate "FEE ADDRESS" for
	ENCE ADDRESS (Note: Use Bi	iock I for any change of ad	fress)	Note Fee(pape	e: A certificate of m s) Transmittal. This rs. Each additional	nailing certifi paper,	can only be used fo cate cannot be used fo such as an assignment incontransmission	domestic mailings of the or any other accompanying tor formal drawing, must
CIRA CENTRE, 2929 ARCH STI	WASHBURN LL , 12TH FLOOR REET	v2009 _P		I be	Certi	ficate Fee(s	of Mailing or Transi	
PHILADELPHI	A, PA 19104-2891							(Depositor's name)
				_				(Signature)
								(Date)
APPLICATION NO.	FILING DATE	ı	FIRST NA	MED INVENTOR		ATTOE	RNEY DOCKET NO.	CONFIRMATION NO.
10/718,951	11/21/2003		Ca	rlton Lane		MSF	Γ-2787/303656.01	2907
TITLE OF INVENTION DEVICE DATABASE	N: SYSTEM AND ME	THOD FOR REGIS	TERING ANI	D DEPLOYING	STORED PROCEI	DURE	S AND TRIGGERS	INTO A
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLIC/	ATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510		\$300	\$0		\$1810	04/28/2009
EXAM	INER	ART UNIT	CLASS	S-SUBCLASS				
TECKLU, IS.	AAC TUKU	2192	71	7-174000				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	" Indication form ed. Use of a Custor	(2) the registe 2 registed,	e names of up to nts OR, alternative name of a single red attorney or a stered patent attor no name will be ENT (print or typ	e firm (having as a r gent) and the names meys or agents. If no printed.	nembe s of up o name	era 2 oto e is 3	cument has been filed for
(A) NAME OF ASSIC	GNEE		(B) RES	IDENCE: (CITY	and STATE OR CO	OUNT:	RY)	up entity 🚨 Government
4a. The following fee(s) a Issue Fee Publication Fee (N Advance Order - #	o small entity discount p	permitted)	A che Paym The I	eck is enclosed. nent by credit car Director is hereby	d. Form PTO-2038	is attac	equired fee(s), any det	
	s SMALL ENTITY state	as. See 37 CFR 1.27.					TTY status. See 37 CF	
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be ac ites Patent and Trade	cepted from an mark Office.	yone other than t	he applicant; a regist	ered a	ttorney or agent; or th	e assignee or other party in
Authorized Signature					Date			
Typed or printed name					Registration No			
This collection of informan application. Confident submitting the completed this form and/or suggestit Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	CFR 1.311. The infor U.S.C. 122 and 37 USPTO. Time will rden, should be sent O NOT SEND FEES	mation is requi CFR 1.14. This vary dependin to the Chief In OR COMPLE	red to obtain or r s collection is est g upon the indiv dormation Office TED FORMS TO	etain a benefit by the imated to take 12 m idual case. Any con r, U.S. Patent and T D THIS ADDRESS.	e publi inutes iments radem SENE	c which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Depa TO: Commissioner i	by the USPTO to process) g gathering, preparing, and he you require to complete atment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,951	11/21/2003	Carlton Lane	MSFT-2787/303656.01	2907
23377	7590 01/28/2009		EXAM	UNER
WOODCOCK	WASHBURN LLP		TECKLU, IS	AAC TUKU
CIRA CENTRE,			ART UNIT	PAPER NUMBER
2929 ARCH STREET PHILADELPHIA, PA 19104-2891			2192 DATE MAIL ED: 01/28/200	9

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 786 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 786 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/718.951 LANE ET AL. Notice of Allowability Examiner Art Unit ISAAC T TECKLU 2192 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 12/04/08. The allowed claim(s) is/are 1,2,4,6-10,12-21,23,25-29 and 31-38 (renumbered as 1-32). 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413),

U.S. Patent and Trademark Office	:6
PTOL-37 (Rev. 08-06)	

Examiner, Art Unit 2192

/Isaac T Tecklu/

Information Disclosure Statements (PTO/SB/08).

4. ☐ Examiner's Comment Regarding Requirement for Deposit

Paper No./Mail Date 9/23/08

of Biological Material

Paper No./Mail Date

9. 🗌 Other _____.

/Tuan Q. Dam/

7. X Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

Supervisory Patent Examiner, Art Unit 2192

Art Unit: 2192

DETAILED ACTION

- 1. This action is responsive to the applicant's amendment filed on 11/03/08.
- Claims 11 and 30 have been previously cancelled.
- Claims 3, 5, 22 and 24 are being currently cancelled.
- Claims 1 and 20 are being amended.
- 5. Claims 1-2, 4, 6-10, 12-21, 23, 25-29, 31-38 are being allowed.

EXAMINER'S AMENDMENT

6. An examiner's amendment to the record appear below. Should the change and/or additions be unacceptable to the Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such amendment, it MUST be submitted no later than the payment of issue fee.

Authorization for examiner's amendment was given in a telephone interview with Mr. Kenneth R. Eiferman, Registration No. 51,647 on 12/04/2008. The application has been amended as follows:

IN THE CLAIMS:

Cancel claims 3, 5, 22 and 24.

Claims 1 and 20 are amended as follows: (see page 4-6)

Application/Control Number: 10/718,951 Page 3

Art Unit: 2192

Allowable Subject Matter

7. The following is an examiner's statement of reasons for allowance:

As applicant pointed out under Remark section, pages 11-14, Snyder U.S. Patent 6.415.246 B1 taken either singly and/or in combination with other cited prior arts, do not embed each stored procedure in the data project into the device database wherein embedding each stored procedure comprises; determining whether the at least one stored procedure has been previously embedded in the device database; and if the at least one stored procedure has been previously embedded, then removing the previously embedded stored procedure, and registering each stored procedure in the data project with the device database; deploying the device database with the at least one embedded stored procedure as a single unit to the device, installing the device database with the at least one embedded stored procedure on the device according to the installation property, wherein installing the device database on the device according to the installation property comprises overwriting an existing device database that was previously installed on the device if the installation property comprises an always overwrite setting, overwriting the existing device dataset if the installation property comprises an overwrite if different setting and the deployed device database is different from the existing device database, and installing the deployed device database on the device if the installation property comprises a never overwrite setting and no existing device database was previously installed on the, as recited in such manners in each of independent claims 1, 9, 20 and 28.

Prior arts of record do not teach and/or suggest these claimed limitations, thus, all remaining pending claims 1-2, 4, 6-10, 12-21, 23, 25-29, 31-38 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2192

AMENDMENTS IN THE CLAIMS

 (Currently Amended) A method for deploying at least one stored procedure to a device, the method comprising:

generating a data project and a device database associated with an installation property within a solution;

associating the data project with the device database;

adding the at least one stored procedure to the data project, the at least one stored procedure comprising a precompiled set of one or more statements for accessing data in a database, one stored procedures being a trigger that is executed in response t o a data modification operation:

receiving a request to build the solution, and, responsive to the request:

automatically embedding each stored procedure in the data project into the device database, wherein embedding each stored procedure comprises;

determining whether the at least one stored procedure has been previously embedded in the device database; and

if the at least one stored procedure has been previously embedded, then removing the previously embedded stored procedure; and

automatically registering each stored procedure in the data project with the device database;

deploying the device database with the at least one embedded stored procedure as a single unit to the device; and

installing the device database with the at least one embedded stored procedure on the device according to the installation property, wherein installing the device database on the device according to the installation property comprises overwriting an existing device database that was previously installed on the device if the installation property comprises an always overwrite setting, overwriting the existing device database if the installation property comprises an overwrite if different setting and the deployed device database is different from the existing

Application/Control Number: 10/718,951

Art Unit: 2192

device database, and installing the deployed device database on the device if the installation property comprises a never overwrite setting and no existing device database was previously installed on the device.

20. (Currently Amended) A computer readable storage medium for deploying a stored procedure to a device, the computer readable storage medium comprising computer executable instructions for:

generating a data project and a device database associated with an installation property within a solution;

associating the data project with the device database;

adding the at least one stored procedure to the data project, the at least one stored procedure comprising a precompiled set of one or more statements for accessing data in, a database, one of the stored procedures being a trigger that is executed in response to a data modification operation;

receiving a request to build the solution, and, responsive to the request:

automatically embedding each stored procedure in the data project into the device database, wherein embedding each stored procedure comprises:

determining whether the at least one stored procedure has been previously embedded in the device database; and

if the at least one stored procedure has been previously embedded, then removing the previously embedded stored procedure; and

automatically registering each stored procedure in the data project with the device database;

deploying the device database with the at least one embedded stored procedure as a single unit to the device; and

installing the device database with the at least one embedded stored procedure on the device according to the installation property, wherein installing the device database on the device according to the installation property comprises overwriting an existing device database that was previously installed on the device if the installation property comprises an always overwrite setting, overwriting the existing device database if the installation property comprises an

Art Unit: 2192

overwrite if different setting and the deployed device database is different from the existing device database, and installing the deployed device database on the device if the installation property comprises a never overwrite setting and no existing device database was previously installed on the device.

Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac Tecklu whose telephone number is (571) 272-7957. The examiner can normally be reached on M-TH 9:300A - 8:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Isaac T Tecklu/ Examiner, Art Unit 2192 /Tuan Q. Dam/ Supervisory Patent Examiner, Art Unit 2192



Application/Control No.	Applicant(s)/Patent under Reexamination		
10/718,951	LANE ET AL.		
Examiner	Art Unit		
ISAAC T. TECKLU	2192		